

VIEW FROM THE CLASSROOM

A look into two schools shows day-to-day use
of differentiated instruction for students
and the professional learning that helps it work

BY PRISCILLA PARDINI

Despite the growing popularity and acceptance of differentiated education as a tool of school reform, what true differentiation looks like in the classroom can sometimes seem unclear.

"I suspect there are a lot of what we term 'differentiation strategies' being used that may not actually be getting kids to standards," said Gayle H. Gregory, an Ontario-based author, educational consultant, and trainer who specializes in, among other things, differentiated education. "They may be neat, engaging activi-

ties, but are they linked to what kids should know or be able to do?"

Gregory believes that true differentiation holds great potential for improving student achievement. That's largely because its methods, which include actively engaging students in their own learning and linking teaching strategies to students' interests, are closely aligned with the latest brain research. She advocates passionately for "the need to take kids into consideration in the learning process, about being more child-centered and responsive than teacher-directed and controlled."

How widely is true differentiation being used? According to Gregory, the

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approach — like any other education innovation — is at "various stages on the continuum," based largely on teachers' level of expertise, their repertoire of instructional practices, and their commitment to differentiation. She says the key to expanding its use is making sure teachers are trained to use an array of instructional methods.

"Even if teachers are aware that the 'I-have-this-lesson-plan-and-I'm-following-it-no-matter-what' approach is perhaps not appropriate, they can't differentiate unless they have a variety of instructional tools at their fingertips."

Those include, for example,





PHOTO BY GIRAUDON/ART RESOURCE, NY

"The Sirens" was painted by Leon Belly (1827-1877) and is owned by the Musee de l'Hotel Sandelin in St. Omer, France.

"backward mapping," a planning strategy in which teachers preassess students to determine whether they have met a specific educational standard and then design a variety of "tiered" lessons and assignments that help students of varying abilities master the standard.

Gregory, co-author with Carolyn Chapman of *Differentiated Instruction Strategies: One Size Doesn't Fit All* (Corwin Press, 2001), points out that

Odysseus is tied to the mast in this painting from the 1800s. At Colchester High School in Vermont, a differentiated lesson on Odysseus' adventures in *The Odyssey* would use tiered assignments: One group would create a Socratic seminar around issues raised in the poem, another would research the structure of ancient Greek society, and another would write and perform a version of the epic.

differentiation involves much more than just offering students a smorgasbord of activities. "You can't just have them using cotton balls to build an igloo," she said. "You have to know your students, and in particular, something about their learning preferences and interests. And you need to be clear about what they are going to be able to do as a result of these activities."

Gregory says good teachers have always intuitively differentiated their instruction. In traditional home economics classes, for example, "not every student made a ball gown. Some made simple skirts." And in primary classrooms, "if kids weren't reading at grade level, you'd find other books for them. This is not rocket science."

Still, because true differentiation requires most teachers to think and plan in new ways, it's "not going to all happen tomorrow," said Gregory. She compares the practice to learning to cook gourmet meals. "You wouldn't do it every day, but if you did it once a week, by the end of the (school) year you'd have 40 differentiated lessons."

To clarify what true differentiation looks like in the classroom and how best to prepare teachers to differentiate, *JSD* discussed the practice

with leaders at two schools noted for their exemplary use of differentiated education.

CONWAY ELEMENTARY SCHOOL Ladue School District St. Louis, Mo.

Observe a language arts lesson at Conway Elementary School in suburban St. Louis, Mo., and you might find a teacher teaching about the use of context clues as a way of helping her students comprehend what they read. And as you would expect, the students are soon asked to get to work practicing and applying the skill. But not by using the same worksheet or some other kind of whole-class activity. Because the teacher has preassessed the students, she can differentiate the rest of the day's lesson.

"What the teacher asks students to do and the readability level of the materials they use varies depending on the students' ability, learning style, or interest," explained Lane Narvaez, the school's principal.

In this case, the teacher divides her students into groups: those who don't yet understand how to use context clues and to whom she must reteach the lesson, those who need to

Good teachers have always intuitively differentiated their instruction, according to Gayle H. Gregory.

work with her in guided practice using context clues, and those who already understand the concept and are ready to practice it on their own. The teacher divides up that last group again, this time based on the students' reading levels.

Before long, "every student is busy and working at his or her level," said Narvaez. "You don't have kids sitting around who are lost because they can't read the material, or students who finish in 10 minutes and are bored for the rest of the class."

The same process is used in a science lesson on the human body. Students unfamiliar with the cardiovascular system, for example, are asked to draw the heart and lungs on a human body cutout, while those who have already demonstrated that knowledge are asked to incorporate the aorta, atrium, ventricles, arteries, and capillaries into their drawings. And while a lesson on the solar system requires everyone in the class to research and construct a replica of a planet, students use different reference books and must meet different stan-

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dards depending on their abilities and how much they already know about the subject.

In spelling, all students are introduced to the same basic rules and patterns. But once a student can use a rule to spell a group of 2nd-grade words correctly, he or she moves on to apply the same rule to 3rd-grade spelling words.

In classrooms where the instruction is differentiated, teachers move around the room, monitoring each group's progress, spending their time where they are most needed.

"Sometimes that's with the high group," said Narvaez. Sometimes it is with students who have not mastered the concept.

Conway Elementary School St. Louis, Mo.

Grades: K-5
Enrollment: 316
Certified staff: 34 full-time equivalents, 8 certified teacher assistants
Racial/ethnic mix:
White: 85%
Black: 9%
Hispanic: 1%
Asian/Pacific Islander: 4%
Native American: 1%
Other: 0%
Limited English Proficient: 3%
Languages spoken: 13
Free/reduced lunch: 3%
Special education: 20%
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Depending on the subject area or topic, students, too, move from group to group. "No student is always high or always low or always average," she added. For example, a student who is in a lower-level group because he is having difficulty learning his multiplication tables might join a higher-level group for a unit on problem solving. "When you preassess, you can see those strengths and weaknesses and be flexible," said Narvaez.

Conway has used differentiated instruction for five years, adopted in hopes of better reaching all students, but especially those who were already achieving at high levels. The curriculum had already been aligned with state standards, and teachers had been providing their highest-achieving students with enrichment activities. "But we knew we weren't taking them from where they actually were and moving them forward," said Narvaez. "That's the goal for every student." She credits schoolwide use of differentiation with taking what had been a good

school and making it great.

The process began in January 2000, when Narvaez attended a three-day institute on differentiation conducted by Carol Ann Tomlinson, followed by staff development that involved the entire faculty in a guided study of differentiation, workshops on specific differentiation strategies, and ongoing coaching. Slowly, over time, the whole staff has embraced the practice. "It's now part of our culture," Narvaez said.

She and her staff contend that the coaching component was the most critical. "You can't send a teacher to a three-day workshop and expect her to come back and train her peers," said Narvaez. "This is a complicated process. And having an expert coach who came in regularly to observe us and give us feedback was absolutely essential. It was critical to creating what we have here."

Narvaez said that as teachers became more familiar with and skilled at differentiation, the design of their lessons changed, largely because they were preassessing students' understanding of the concepts to be taught. Thus, lessons included not only curriculum objectives, but also specific information about individual student needs.

Conway's standardized test scores in reading, math, and language arts have jumped significantly since the school began differentiating instruction, Narvaez said. Data from the Missouri Assessment Program (MAP), for example, reveal that in 2000, before differentiation was implemented, 15% of Conway's 4th graders were scoring at Level 5, the highest level of achievement. In 2003, two years after differentiation was implemented, 24% of students were scoring at Level 5 on the MAP. Reading scores on the TerraNova, a standardized achievement test, also improved, with only 24% of students scoring below the 65th percentile in 2003, compared with 38% in 2000.

Narvaez said that because students are working at their own level, they're also less likely to tune out or become frustrated, which in turn results in fewer discipline problems. "These are classrooms where students are actively engaged and where students can succeed, and a school in which diversity is embraced," she said. "It's a matter of fairness, which is not everyone getting the same thing, but everyone getting what he or she needs."

COLCHESTER HIGH SCHOOL
Colchester School District
Colchester, Vt.

Their desire to address the needs of a wide variety of students led faculty members of Colchester High School in Colchester, Vt., to adopt differentiated instruction as a component of the school's reform effort five

years ago. Located in a suburban/rural area bordering Burlington, Vermont's largest city, the school draws from a community that includes a wide range of income levels.

"We had become a very highly tracked school," recalled Joyce Stone, Colchester's principal. "And while the performance of the kids in the high track was very good, we could see we were really not addressing the needs of kids in the middle, much less the cohort that was struggling."

When Stone and her faculty began researching the best instructional practices being used across the country, they quickly zeroed in on differentiated instruction. "It was the practice we found most appealing," recalled Stone, who began sending small teams of teachers to places such as California, Chicago, and Tampa to

attend workshops. Next on the agenda: developing a three-year professional development plan based on identified needs as well as the school's vision and mission. Specifically, the plan called for research and projects related to assessing student work, using learning style inventories, and differentiating instruction.

Today, students are grouped heterogeneously and differentiated instruction is widely practiced, especially in 9th- and 10th-grade humanities and math classes. To set the stage for effective differentiation, staff members gather information on every incoming student detailing his or her ability level, interests, and learning style. Classes — which typically include 40 students, a team of two teachers, and perhaps an aide or two — are then set up to include equal

numbers of high-, middle-, and low-ability students, a configuration Stone calls “stratified heterogeneity.”

“If you randomly group students, you’re going to set up adverse situations for teachers to deal with,” explained Stone. “But if every team is balanced, you not only guard against de facto tracking, but also make it more conducive for teachers to differentiate.”

And differentiate they do. In a unit on Greek mythology, for example, teachers assign each student, based on his or her reading level, one of three different versions of Homer’s *The Odyssey*: the standard, unabridged version; a somewhat abridged version that includes a running menu of vocabulary words along the side of each page; or an easier-to-read story version of the classic myth. And while everyone in the class is introduced to *The Odyssey*’s major themes, students undertake tiered assignments based on their readiness or ability levels, learning styles, and/or areas of interest. One group might be asked to create a Socratic seminar around the issues raised in *The Odyssey*, another to research the structure of ancient Greek society, and still another to write and perform their own version of *The Odyssey*.

A unit on the Middle Ages begins with everyone in the class reading *Crispin* (Hyperion, 2002), an easy-to-read, award-winning work of historical fiction written by Avi. “It’s good and informative, but written at a somewhat lower level that all kids can grasp,” explained humanities teacher Bill Rich. “That way, everyone is introduced to the big concepts around the Middle Ages and the transition into the Renaissance.” Teachers then make supplemental reading assignments and guide students in independent research. “But it’s all tiered,” said Rich, “and often based on students’ own interests.”

When the class studies the impact

Colchester High School Colchester, Vt.

Grades: 9-12

Enrollment: 808

Certified staff: 61 teachers

Racial/ethnic mix:

White:	95.5%
Black:	1.4%
Hispanic:	0.5%
Asian/Pacific Islander:	1.2%
Native American:	0.4%
Other:	1%

Limited English Proficient: 3%

Languages spoken: 8

Free/reduced lunch: 25%

Special education: 13%

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of Niccolo Machiavelli, for example, students read either his original work, *The Prince*, a textbook summary of Machiavelli’s ideas, or a graphic novel based on the life of Machiavelli. Students also choose an area of interest to research and write about. Some of the most popular topics: medieval weaponry, exploration, and courtly love. Although students are all expected to write to the same high standard, writing assignments take into account students’ learning styles. Some choose to write traditional research papers, while others opt to write in a more creative form, such as dialogues.

Rich, who serves on the school’s professional development committee, said the challenge for teachers who want to differentiate their instruction is finding “alternative paths to the same destination.” And that, added Rich, calls for teachers “to be really clear about what that destination is. It requires a high-quality curriculum that is very precise about what kids need to know.”

According to Rich, professional development sessions at Colchester focus on brain research and learning styles and have been critical to teachers’ understanding of and willingness to use differentiation. “That’s the primary reason for differentiating, because people learn differently,” he said.

Because that’s true for staff as well as students, professional development at the school is also differentiated. Teachers are not only preassessed to determine how much they already know about differentiation, but also are given a chance to join learning circles where they can engage in collaborative activities that match their interest and learning styles. “We’re very clear about the fact that this is the kind of capacity we’re trying to build,” said Rich. “So we want teachers to tell us what they would like to do, what they need to know. We allow them to be put in a setting where they are not all having to do the same thing at the same time.”

According to Stone, Colchester’s test scores have doubled over the last five years. The number of students “performing with honors,” for example, on the New Standards Reference Exam, a state test in English, language arts, and math, jumped from 2% to 7% in reading, and from 10% to 24% in math, between 1999 and 2003. She also notes an increase (from 41% to 64%) in the number of students achieving scores at or above 3 on Advanced Placement examinations between 1998 and 2003. Other positive indicators: lower dropout rates and fewer student suspensions and expulsions.

She is certain the gains are linked to the use of differentiated instruction. “We’ve made incredible progress,” said Stone. “Everyone at Colchester is not only getting a college-prep curriculum, but also instruction and assessment designed to meet their needs.” ■